ABSTRACT

Many proteins, when produced recombinantly, suffer from improper processing, folding and lack normal solubility. Modified proteins, including those indicative of disease states, also can have such defects. The present invention is directed to methods of identifying proper and improper protein folding, aberrant processing and/or insolubility. The method relies on the use of two components: a specialized fusion protein and structural complementation. The fusion protein contains sequences from the protein of interest and one portion of a marker protein that, by itself, is not active. A host cell then provides the remainder of the marker protein that serves to "complement" the function of the fused marker protein such that their association restores activity, permitting detection.